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A Case of Familial Mediterranean Fever Diagnosed by Abdominal CT Scan in a Patient Previously Diagnosed with Functional Abdominal Pain.

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INTRODUCTION

- Familial Mediterranean fever (FMF) is a hereditary autoimmune disease in which patients present with periodic, self-limited episodes of fever and serositis.
- FMF is suspected based on clinical symptoms; there are major and minor criteria to aid in making the diagnosis.
- We present a case in which the patients only symptom was recurrent abdominal pain that was previously diagnosed as functional abdominal pain. FMF was suspected based on unexplained focal peritonitis on computerized tomography (CT).

CASE PRESENTATION

- A 45-year-old male of Middle Eastern descent was seen in clinic complaining of episodic right upper quadrant (RUQ) abdominal pain since the age of 17. Episodes occurred once or twice per month. Over the years he had extensive work up including endoscopic evaluation, specialized imaging studies, and multiple surgical interventions without benefit.
- He was diagnosed with Functional Abdominal Pain then.
- Presented to the ED months later. He was afebrile; exam was remarkable for localized RUQ tenderness Lab work was remarkable for an elevated ESR of 31. Abdominal CT showed localized fat stranding around the hepatic flexure and the proximal half of the transverse colon.
- Given history of recurrent abdominal pain, ethnicity, and focal unexplained peritonitis on CT scan, FMF was suspected, and treatment with colchicine was initiated with resolution of symptoms

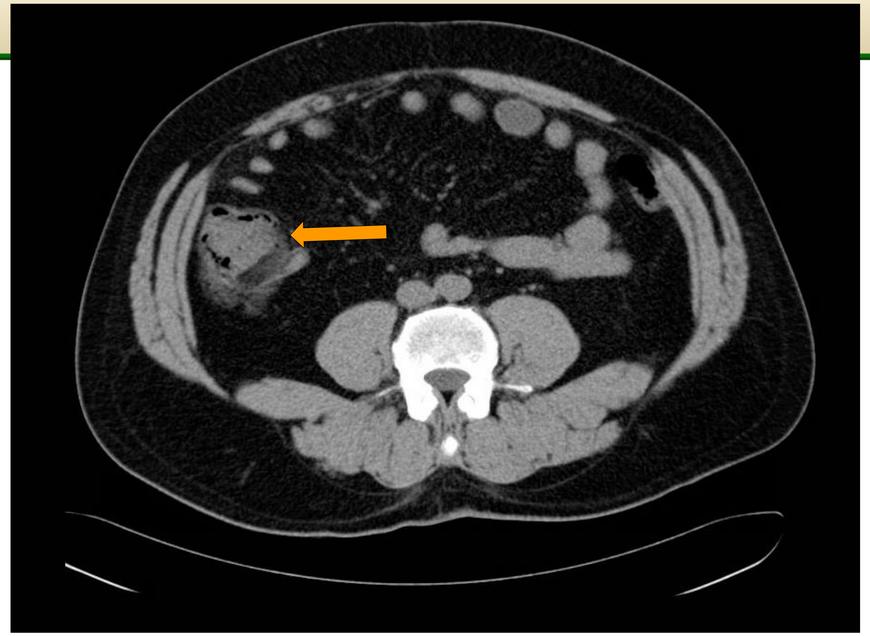

Image 1: Abdominal CT Scan with evidence of localized fat stranding and edema in the hepatic flexure and proximal half of transverse colon.

Relevant Laboratory Values	
Hgb	12.4(L)
HCT	36.4(L)
MCV	76.0(L)
WBC	10.9
Platelets	240
ESR	31(H)
Neutrophil %	80.9(H)

Basic Metabolic Panel	
Sodium	134
Potassium	4.0
Chloride	99
Carbon dioxide	31
BUN	11
Creatinine	1.0
Glucose	121(H)

DISCUSSION

- Familial Mediterranean Fever can present with recurrent episodes of fever, associated with pleuritic chest pain, arthritis, or even peritonitis. It is most prevalent in population of Middle Eastern descent.
- If not considered, FMF can remain misdiagnosed for many years leading to unnecessary procedures and surgeries.
- This was an unusual presentation given the absence of fever, with episodes of intermittent RUQ pain.
- The diagnosis was ultimately suspected by CT findings of localized fat stranding and confirmed by a positive response to colchicine therapy.
- Clinicians should consider FMF in patients of high-risk ethnic origin presenting with unexplained focal peritonitis on CT scan.

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